



OLD WORLD CIVILIZATION—A parallel in the Old World is the tomb pyramid of the Warrior King Chephren built in the same era as the Yucatan temple. An interesting feature of these military-religious edifices is that the cubic content of each is greater than that of the total of all the private dwellings of the people who built them.

large as those of the Old World.

The priesthood, devoting full time to religious matters, laid the foundations of astronomy, writing and mathematics in all centers.

Militarism had its birth in this era, and it was with the help of the military that the rulers were able to extend their authority over subject states and enlarge their irrigation works. A temporary decrease in population probably followed the initiation of large-scale warfare.

Then followed the era that Dr. Steward calls the era of "Cyclical Conquests." This was a time of empire building and large scale militarism. Now cities were founded in all the world centers. Trade developed within empires and even beyond, and in

some centers money was used. The principal change in manufactures was a strong trend toward standardization and mass production. In some centers there was a military class and captives of war became slaves.

Then population pressure and abuse of the common people brought rebellion, which destroyed the empires and returned society to local states and a period of dark ages. Irrigation works were then neglected and population decreased.

This empire-building era was ended in the Old World with coming of the Iron Age. In the New World it was interrupted by the Spanish Conquest. That ended the natural development of the native American culture, and pre-Columbian civilization.

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AERONAUTICS

Helicopter Gets Capsule

► A PROJECTED "capsule-carrying" helicopter will join forces with a capsule-carrying airplane to deliver freight from an airport near its source to out-of-the-way places where planes can not land. The capsule in this case is an attachable and detachable cargo compartment about the size of the body of an ordinary overland passenger bus.

The capsule-carrying plane was announced

a year or so ago by the Fairchild Engine and Airplane Corporation, Hagerstown, Md., its designer and builder. The planned helicopter capsule-carrier has just been revealed in PEGASUS, publication of the Fairchild company, but it is to be constructed by Piasecki Helicopter Corporation, Morton, Pa.

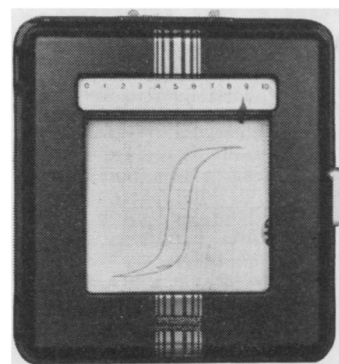
The airplane will carry the cargo compartment to the airport nearest to the final

destination, and deposit it upon the runway. The helicopter will pick it up at that point and take it, without having to reload, on the final section of its route. This could provide easy and quick transportation of needed equipment or supplies from manufacturers to users, particularly to American soldiers who, in another war, might find themselves in a hard-to-get-at location.

The carrier plane is a version of the Fairchild Packet, now widely used as a cargo ship by the armed services. In it the box-car-size cargo compartment which forms the lower part of the ordinary Packet, is omitted and the space is available for the detachable capsule. The operating part of the plane remains about the same. The main landing wheels of the new version are at the end of struts long enough to permit the plane to straddle the capsule as it rests on the runway. Mechanism is provided by means of which the capsule is raised to become the "belly" of the carrier, to which it is firmly attached.

The helicopter to be used, which will probably be ready for tests within two or three years, will also be able to straddle the capsule. It will be somewhat like the type of helicopters built by Piasecki and now in service in that it will be an elongated affair with overhead lifting and propulsion rotor blades at front and rear.

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A new Speedomax Recorder saves hours of data plotting by automatically drawing the relationship between any two variables instead of plotting just one as a function of time as done by usual recorders. The new instrument has two high speed electronic circuits . . . one for each axis. In other respects, it's a standard Speedomax.

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